

Amendments to the Claims

Please amend claims 1, 9 and 10. Please cancel claim 8. The pending claims after amendment are listed below.

- 1 1. (Currently Amended) A method for manufacturing a disk substrate for a rotating disk
2 drive data storage device, comprising the steps of:
3 providing a disk substrate having a circumferential edge, said disk substrate being of a
4 material from the set of materials consisting of: glass, ceramic, and a combination of glass and
5 ceramic;
6 loading said disk substrate to an edge finishing apparatus; and
7 grinding said circumferential edge of said disk substrate in a ductile grinding regime using
8 said edge finishing apparatus;
9 wherein said disk substrate is finished for installation in a disk drive data storage device
10 without chemical strengthening of said disk substrate.
- 1 2. (Previously Presented) The method for manufacturing a disk substrate of claim 1, wherein
2 said disk drive data storage device is a rotating magnetic disk drive data storage device, said disk
3 substrate being subsequently coated with a magnetic coating after said grinding step.
- 1 3. (Previously Presented) The method for manufacturing a disk substrate of claim 1, further
2 comprising the step of coarse grinding said circumferential edge in a non-ductile mode, said step
3 of coarse grinding said circumferential edge in a non-ductile mode being performed before said
4 step of grinding said circumferential edge in a ductile grinding regime.

1 4. (Previously Presented) The method for manufacturing a disk substrate of claim 1, wherein
2 said disk substrate contains an outer circumferential edge at the periphery thereof and a central
3 aperture defining an inner circumferential edge, and wherein said grinding step is applied to both
4 said outer circumferential edge of said disk substrate and to said inner circumferential edge.

1 5. (Previously Presented) The method for manufacturing a disk substrate of claim 1, wherein
2 said grinding step comprises grinding said edge with a formed grinding appliance conforming to
3 an edge radius at said circumferential edge.

1 6. (Previously Presented) The method for manufacturing a disk substrate of claim 1, wherein
2 said grinding step comprises bringing a grinding appliance of said edge finishing apparatus in
3 contact with said circumferential edge and providing relative motion between said grinding
4 appliance and circumferential edge of approximately 30 m/sec or more.

1 7. (Previously Presented) The method for manufacturing a disk substrate of claim 1, wherein
2 said edge finishing apparatus comprises a grinding appliance having diamond particles of
3 approximately 6 microns or less.

8. (Cancelled)

1 9. (Currently Amended) The method for manufacturing a disk substrate of ~~claim 8~~ claim 1,
2 wherein said disk substrate is of a material which is not chemically strengthenable.

1 10. (Currently Amended) A method for manufacturing a disk substrate for a rotating disk
2 drive data storage device, comprising the steps of:

3 providing ~~an~~ a disk substrate having a cut, unfinished circumferential edge, said disk
4 substrate being of a material from the set of materials consisting of glass, ceramic, and a
5 combination of glass and ceramic, wherein said disk substrate material is not chemically
6 strengthenable; and

7 finishing said circumferential edge of said disk substrate to a finished state suitable for use
8 in a disk drive data storage apparatus using at least one edge finishing apparatus.

1 11. (Previously Presented) The method for manufacturing a disk substrate of claim 10,
2 wherein said step of finishing said circumferential edge of said disk substrate comprises grinding
3 said edge in a ductile grinding regime.

1 12. (Previously Presented) The method for manufacturing a disk substrate of claim 10,
2 wherein said disk drive data storage device is a rotating magnetic disk drive data storage device,
3 said method further comprising the step of coating at least one flat surface of said disk substrate
4 with a magnetic coating, said coating step being performed after said grinding step.

1 13. (Previously Presented) The method for manufacturing a disk substrate of claim 10,
2 wherein said disk substrate contains an outer circumferential edge at the periphery thereof and a
3 central aperture defining an inner circumferential edge, and wherein said finishing step comprises
4 finishing both said outer circumferential edge of said disk substrate and said inner circumferential
5 edge.

1 14. (Previously Presented) The method for manufacturing a disk substrate of claim 10,
2 wherein said step of finishing said circumferential edge grinding step comprises forming an edge
3 radius at said circumferential edge.

1 15. (Previously Presented) A method for manufacturing a disk substrate for a rotating disk
2 drive data storage device, comprising the steps of:
3 providing a disk substrate having a cut, unfinished circumferential edge, said disk substrate
4 being of a material from the set of materials consisting of glass, ceramic, and a combination of
5 glass and ceramic;
6 finishing said circumferential edge of said disk substrate to a finished state suitable for use
7 in a disk drive data storage apparatus by application of mechanical forces using at least one edge
8 finishing apparatus, said finishing step being accomplished without chemical strengthening of
9 said disk substrate.

1 16. (Previously Presented) The method for manufacturing a disk substrate of claim 15,
2 wherein said disk substrate is of a material which is not chemically strengthenable.

1 17. (Previously Presented) The method for manufacturing a disk substrate of claim 15,
2 wherein said step of finishing said circumferential edge of said disk substrate comprises grinding
3 said edge in a ductile grinding regime.

1 18. (Previously Presented) The method for manufacturing a disk substrate of claim 15,
2 wherein said disk drive data storage device is a rotating magnetic disk drive data storage device,
3 said method further comprising the step of coating at least one flat surface of said disk substrate
4 with a magnetic coating, said coating step being performed after said grinding step.

1 19. (Previously Presented) The method for manufacturing a disk substrate of claim 15,
2 wherein said disk substrate contains an outer circumferential edge at the periphery thereof and a
3 central aperture defining an inner circumferential edge, and wherein said finishing step comprises
4 finishing both said outer circumferential edge of said disk substrate and said inner circumferential
5 edge.

- 1 20. (Previously Presented) The method for manufacturing a disk substrate of claim 15,
2 wherein said step of finishing said circumferential edge grinding step comprises forming an edge
3 radius at said circumferential edge.

21-43. (Cancelled)